Application No. 09/824,741

Amendment dated August 17, 2004

Reply to Office Action of June 17, 2004

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims:

Claim 1 (previously presented) A method of preconditioning an anion exchange resin in

the absence of calcium carbonate, comprising:

(a) providing an anion exchange resin bed, wherein said anion exchange

resin is to be preconditioned,

(b) providing ultra-high purity carbon dioxide gas,

(c) passing said ultra-high purity carbon dioxide gas through said anion exchange

resin bed, thus forming an ion exchange resin in the bicarbonate form.

Claim 2 (original) The method of Claim 1, wherein the anion exchange resin is a

DOW® 550 anion exchange resin.

Claim 3 (original) The method of Claim 1, further comprising prior to passing said

carbon dioxide gas through said anionic exchange resin, purifying the carbon dioxide

gas.

Claim 4 (original) The method of Claim 3, wherein the carbon dioxide gas is purified in

an ionic purifier in which the carbon dioxide gas is brought into countercurrent contact in

a column with a liquid comprising high-purity water, [thereby forming a purified carbon

dioxide gas]which is removed from the ionic purifier.

Claim 5 (original) The method of Claim 4, wherein packing material is disposed inside

the column.

Claim 6 (original) The method of Claim 5, wherein the carbon dioxide gas is introduced

into the column at a point below the packing material.

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Claim 7 (original) The method of Claim 5, wherein the liquid is continuously introduced into the column at a point above the packing material, and the carbon dioxide gas is continuously introduced into the column.

Claim 8 (original) The method of Claim 1, wherein the preconditioning is performed in situ in an anion exchange column containing the anion exchange resin bed.

Claim 9 (original) The method of Claim 8, wherein the column further contains high purity water through which the carbon dioxide gas is bubbled.

Claim 10 (original) The method of Claim 8, wherein the carbon dioxide gas is introduced into a bottom portion of the column and is removed from a top portion thereof.

Claim 11 (cancelled)

Claim 12 (previously presented) The method of Claim 1, wherein the carbon dioxide gas is passed through the anion exchange resin for a period of from about 7 to 10 hours.

Claim 13 (original) The method of Claim 1, further comprising contacting the anion exchange resin with deionized water after passing the carbon dioxide gas through the resin.

Claim 14 (original) The method of Claim 13, wherein the carbon dioxide is passed through the resin bed at about atmospheric pressure.

Claim 15 (previously presented) A resin preconditioned in the absence of calcium carbonate by the method, comprising:

(a) providing an anion exchange resin bed contained within a column,

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(b) providing ultra-high purity carbon dioxide gas, passing said ultra-high purity carbon dioxide gas through said anion exchange resin bed, thus forming an ion exchange resin in the bicarbonate form.

Claim 16 (cancelled)

Claim 17 (original) The resin of Claim 15, wherein the resin is DOWEX®550A (OH).

Claim 18 (currently amended) A method of purifying a hydrogen peroxide solution in the absence of calcium carbonate, comprising:

- (a) providing an anion exchange resin bed contained within a column,
- (b) providing ultra-high purity carbon dioxide gas,
- (c) passing said ultra-high purity carbon dioxide gas through said anion exchange resin bed, thus forming an ion exchange resin in the bicarbonate form, and
- (d) passing the hydrogen peroxide solution through said column <u>containing</u> said anion exchange resin bed.

Claim 19 (original) The method of Claim 18, wherein the hydrogen peroxide solution has a hydrogen peroxide concentration of 50 weight percent or less.

Claim 20 (original) The method according to Claim 18, wherein the resin is a DOW 550® anionic exchange resin.

Claim 21 (original) The method according to Claim 18, wherein the hydrogen peroxide solution is passed through the column in an upflow mode.

Claim 22 (original) The method according to Claim 18, further comprising passing the hydrogen peroxide solution through a second column ion exchange column in series with the first column.

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Claim 23 (original) The method according to Claim 22, wherein said second column contains a cation exchange resin.

Claim 24 (original) The method according to Claim 22, further comprising passing the hydrogen peroxide solution through a third column for removing total organic carbon impurities in said hydrogen peroxide solution, wherein the said third column is connected in series with and upstream of the first and second columns.

Claim 25 (original) The method according to Claim 18, wherein ionic impurities are removed from a hydrogen peroxide solution.